Adopted: July 28, 1944 File No. 426-44

REPORT OF THE CIVIL AERONAUTICS BOARD on the Investigation of a Mid-Air Collision Between Two Local Instruction Flights

A mid-air collision which occurred approximately 5 miles south of the New Castle Airport, New Castle, Pennsylvania, about 4:20 p.m. on February 17, 1944, resulted in fatal injuries to Instructor James Hugh Pardee and his student, Glenn Denning, Jr., in Piper J3F-65, NC 38371. Instructor Joseph Warren McClure and his student, Thomas Francis McCann, in Piper J3F-65, NC 38256, escaped injury. Both instructors held commercial pilot certificates with flight instructor ratings. Pardee had flown about 976, and McClure approximately 1875 solo hours. Students Denning and McCann were War Training Service naval elementary trainees. Both aircraft were owned by Findley C. Wilson. NC 38371 was demolished and NC 38356 received major damage.

Pardee and Denning took off from the New Castle Airport in Piper NC 38371 at approximately 4:00 p.m. for the purpose of giving Denning his final check flight in the elementary course. Just a few minutes earlier Instructor McClure and Trainee McCann had taken off from the same airport in Piper NC 38256 to flight check McCann. The occupants of both planes were equipped with parachutes and the instructors were occupying the front seats. According to Instructor McClure, he and his student flew the regular traffic pattern and proceeded to a practice area about five miles south of the airport at an altitude of approximately 1000 feet, then let down to 700 feet and had been practicing a sequence of low altitude maneuvers for a period of about 15 minutes. While heading in a north-northeasterly direction, passing through an intersection of two crossroads preparatory to starting a figure eight maneuver, their left wing tip collided with the left wing of Pardee's plane, which was heading in the opposite direction. McClure immediately took over the controls and monouvered his plane to a safe landing in a field about one mile from the scene of the collision. The other plane went out of control and spun into the ground at a steep angle.

Marks on both aircraft indicated that the clame flow by Pardee and Denning was descending when its left wing tip struck the left wing of the other aircraft along a point approximately three feet inboard from the tip. Both spars of the left wing of Pardee's plane wer- fractured at a point approximately midway inboard of the wing panel, rendering lateral control ineffective.

It seems inconceivable that both planes had been flying in the same area for a period of about 15 minutes without the occupants observing each other, even if they were at different altitudes, and illustrates the carelessness and lack of vigilance instructors and students are apt to inhibit with the feeling that when they are assigned to a certain area that now at to the iselves. Instructor McClure stated that he remembered looker thead while flying over the crossroads intersection but that he was making notes and sketches of errors by the trainee and his attention was momentarily

diverted. Both he and his student stated that they did not see the other plane prior to the collision.

It was customary at this operation when flight-checking a student to let him use the same area he had used for practice, and, since both trainees had been assigned to the same instructor, both were automatically assigned to, and had been using, the same practice area. The instructors had not prearranged their flights and apparently neither had any previous knowledge that the other was going to use the same practicarea, as they were not aware that the trainees to be checked were students of the same instructor.

Since this accident the operator has taken the following corrective action: No check flights will be given in the area assigned to the trainee's instructor, unless previous verbal arrangements have been made between the check pilot and other persons using the area. If such arrangements are not made, the check ride will be given in some other area which is not in use.

While lack of attention to the matter of assigning practice areas was a contributing condition, the probable cause of this accident was lack of vigilance of the occupants of both aircraft.

BY THE BOARD

/s/ Fred n. Toombs
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